

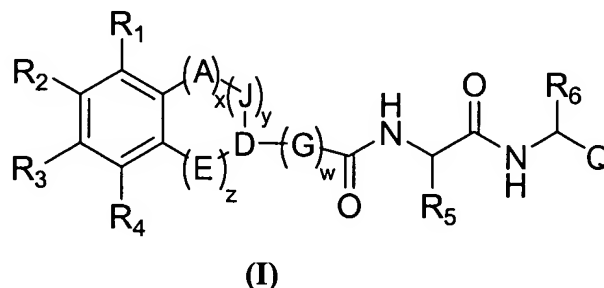
AMENDMENTS TO THE CLAIMS

The Examiner is directed to the International Preliminary Examination Report (IPER) issued February 5, 2004 in which it is reported that Applicant's amendments to the claims filed on November 19, 2003 under PCT Article 34 have been entered. For the convenience of the Examiner, copies of the 11/19/03 Amendment and the IPER are enclosed herewith, as Appendices A and B, respectively.

Claims as amended in the 11/19/03 Article 34 Amendment are listed below as "Previously Presented". In addition, currently amended claim 1 takes into account amendments made in the Article 34 Amendment file November 19, 2003.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Currently Amended)** A compound having the structure **(I)**:



~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable derivative thereof;

wherein each occurrence of ~~A, J, E, D or G~~ A, J, E, D and G is independently CR_A, CR_AR_B, C=O, O, S, NR_A, or N, wherein each occurrence of R_A and R_B is independently hydrogen, a protecting group, or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety;

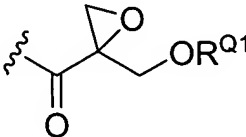
A and J, J and D, D and E, and D and G are each independently linked by a single or

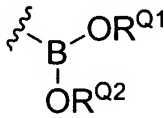
double bond as valency permits;

w, x, y and z are each independently 0, 1, 2, 3, 4, 5 or 6, but the sum of x, y and z is 2-6;

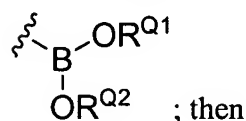
R₁, R₂, R₃ and R₄ are each independently hydrogen, halogen, -CN, -OR_C, -SR_C, -NR_CR_D, -(C=O)R_C or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, wherein each occurrence of R_C and R_D is independently hydrogen, a protecting group, or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or R_C and R_D, taken together, form a heteroalicyclic or heteroaryl moiety; or wherein any two adjacent groups R₁, R₂, R₃ and R₄, taken together, form an alicyclic or heteroalicyclic moiety, or an aryl or heteroaryl moiety;

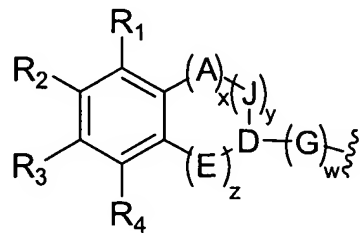
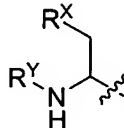
R₅ and R₆ are each independently an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety; and

Q is an epoxycarbonyl moiety having the structure: , or a boron-

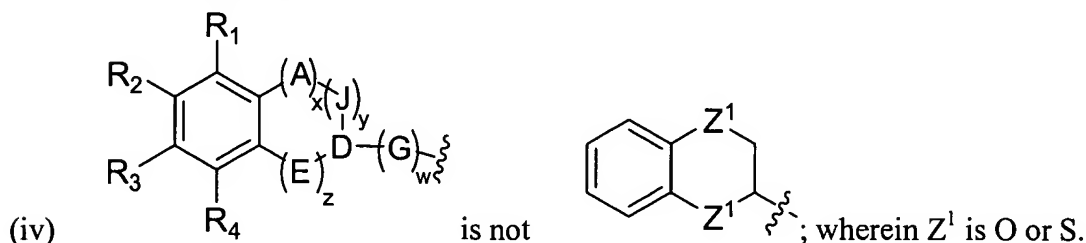
containing moiety having the structure: ; wherein wherein R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2}, taken together, form a heteroalicyclic moiety; or, when Q is an epoxycarbonyl moiety, R^{Q1} may also be a prodrug moiety;

with the proviso that, when Q is a boron-containing moiety having the structure:

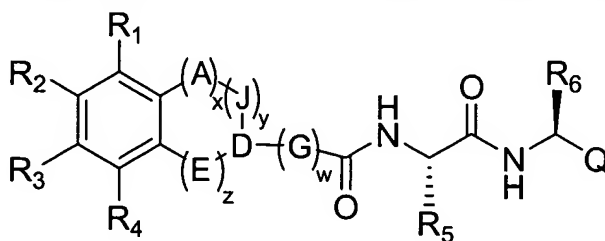


(i)  is not  where R^X is aryl or heteroaryl and R^Y is aryl, heterocyclyl, alylalkylcarbonyl or heterocyclylalkylcarbonyl;

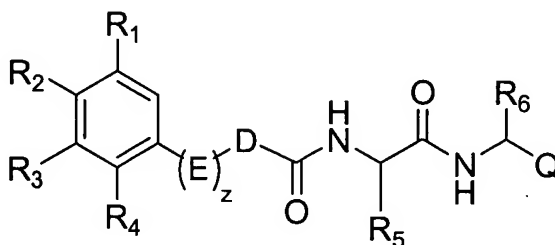
- (ii) if D is N or CH, and (a) w is 0, or (b) w is 1 and G is $-\text{CH}(\text{OH})-\text{CH}_2-$, then neither occurrence of J nor E attached to D, nor the occurrence of A attached to D when y is 0, is a nitrogen atom substituted with hydrogen or a nitrogen protecting group typically employed in peptide synthesis;
- (iii) when w is other than 0, then the occurrence of G attached to D is not N or CH substituted with $-\text{NR}^x\text{R}^y$ where R^x is hydrogen or alkyl and R^y is hydrogen or a nitrogen protecting group typically employed in peptide synthesis; and/or



2. **(Original)** The compound of claim 1, wherein the compound has the structure:



3. **(Currently Amended)** A compound not comprising more than two consecutive α -amino acid residues having the structure:



~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable derivative thereof;

wherein each occurrence of E and D is independently absent, CR_A , CR_AR_B , $\text{C}=\text{O}$, O, S,

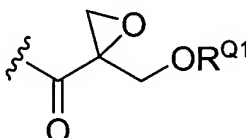
NR_A, or N, wherein each occurrence of R_A and R_B is independently hydrogen, a protecting group, or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety;

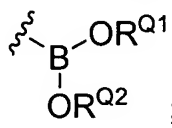
D and E are each independently linked by a single or double bond as valency permits;

z is 0, 1, 2, 3, 4, 5 or 6;

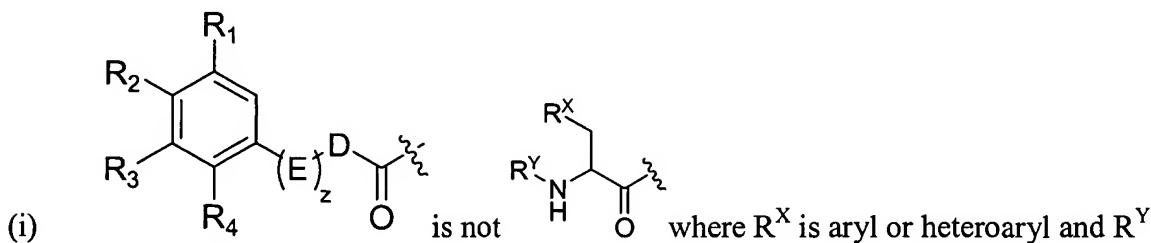
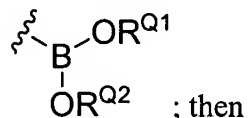
R₁, R₂, R₃ and R₄ are each independently hydrogen, halogen, -CN, -OR_C, -SR_C, -NR_CR_D, -(C=O)R_C or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, wherein each occurrence of R_C and R_D is independently hydrogen, a protecting group, or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or R_C and R_D, taken together, form a heteroalicyclic or heteroaryl moiety; or wherein any two adjacent groups R₁, R₂, R₃ and R₄, taken together, form an alicyclic or heteroalicyclic moiety, or an aryl or heteroaryl moiety;

R₅ and R₆ are each independently an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety; and

Q is an epoxycarbonyl moiety having the structure: , or a boron-

containing moiety having the structure: ; wherein wherein R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2}, taken together, form a heteroalicyclic moiety; or, when Q is an epoxycarbonyl moiety, R^{Q1} may also be a prodrug moiety;

with the proviso that, when Q is a boron-containing moiety having the structure:

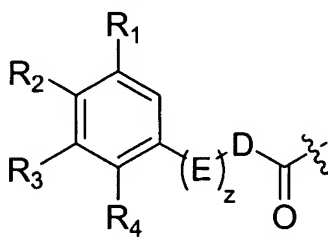


is aryl, heterocyclyl, alylalkylcarbonyl or heterocyclylalkylcarbonyl;

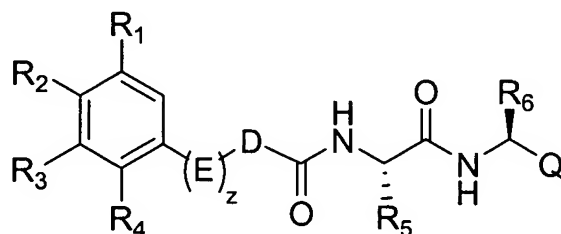
(ii) at least one of R_1 - R_4 is not H;

(iii) if $-(E)_z-D-$ is $-CH_2-$ and one of R_1 - R_4 is MeO- or halogen, then the others are not each hydrogen;

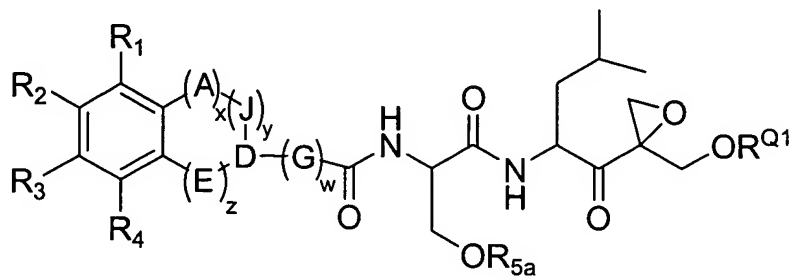
(iv) the occurrence of E attached to phenyl, or D when z is 0, is not N or CH substituted with $-NR^xR^y$ where R^x is hydrogen or alkyl and R^y is hydrogen or a nitrogen protecting group typically employed in peptide synthesis; and/or

(v)  is not a nitrogen protecting group typically employed in peptide synthesis.

4. **(Previously Presented)** The compound of claim 3, wherein the compound has the structure:

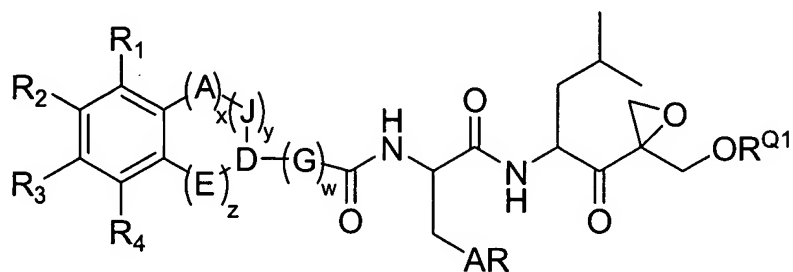


5. **(Previously Presented)** The compound of claim 1, wherein R_5 is $-CH_2OR_{5a}$ and the compound has the structure:



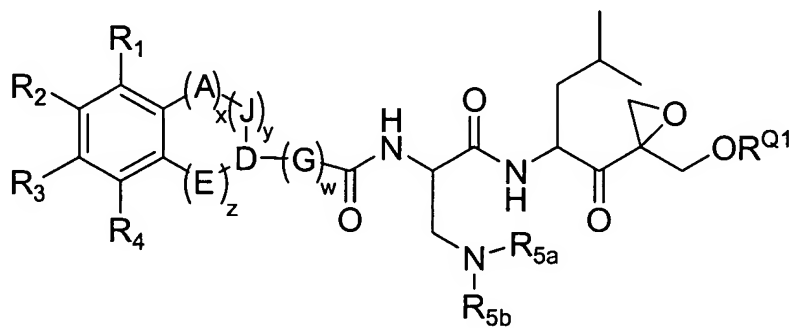
wherein R_{5a} is hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, an oxygen protecting group or a prodrug moiety.

6. **(Previously Presented)** The compound of claim 1, wherein R_5 is aryl or heteroaryl and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety.

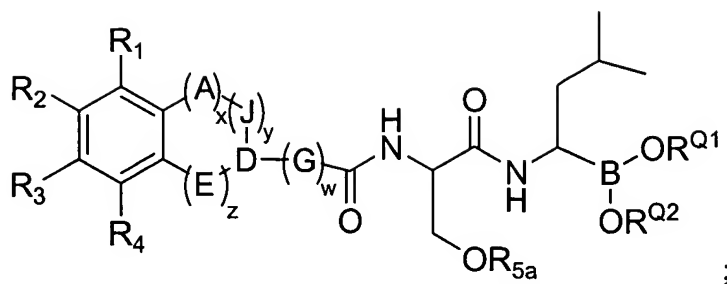
7. **(Previously Presented)** The compound of claim 1, wherein R_5 is $-\text{CH}_2\text{NR}_{5a}\text{R}_{5b}$ or heteroaryl and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b} , taken together, form a heteroalicyclic or heteroaryl moiety.

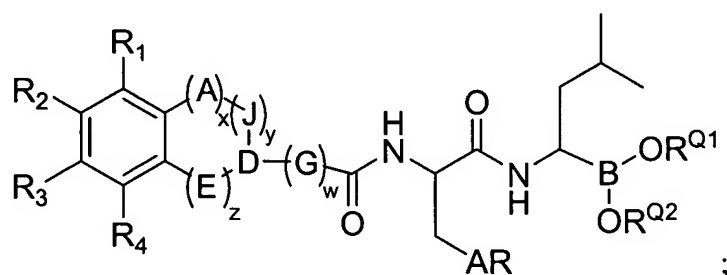
Claims 8-9 (Canceled)

10. **(Previously Presented)** The compound of claim 1, wherein R_5 is $-\text{CH}_2\text{OR}_{5a}$ and the compound has the structure:



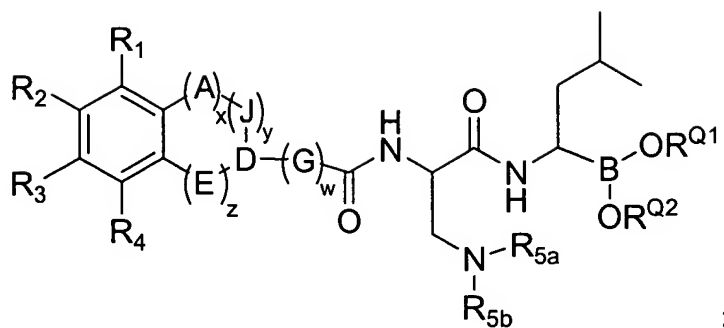
wherein R_{5a} is hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, an oxygen protecting group or a prodrug moiety.

11. **(Previously Presented)** The compound of claim 1, wherein R_5 is aryl or heteroaryl and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety.

12. **(Previously Presented)** The compound of claim 1, wherein R_5 is $-\text{CH}_2\text{NR}_{5a}\text{R}_{5b}$ or heteroaryl and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b} , taken together, form a heteroalicyclic or heteroaryl moiety.

13. **(Currently Amended)** The compound of ~~any one of claims 1, 2, 5-7, and 10-12~~ claim 1, wherein x , y and z are each 1, and A , J , D , and E are each CH_2 .

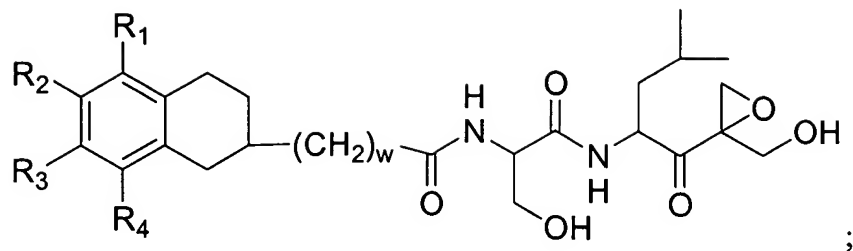
14. **(Currently Amended)** The compound of ~~any one of claims 1, 2, 5-7, and 10-12~~ claim 1, wherein w , x and y are each 0.

15. **(Canceled)**

16. **(Currently Amended)** The compound of ~~any one of claims 1, 2, 5-7, and 10-12~~ claim 1, wherein G is CH_2 and w is 0, 1, or 2.

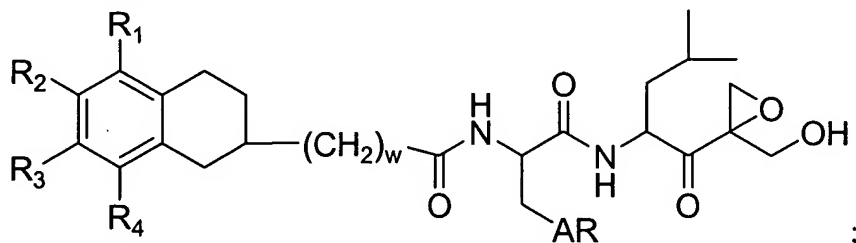
17. **(Currently Amended)** The compound of ~~any one of claims 1, 2, 5-7, and 10-12~~ claim 1, wherein x , y and z are each 1; A , J , D , and E are each CH_2 ; G is CH_2 and w is 0, 1, or 2.

18. **(Original)** The compound of claim 1, wherein x , y and z are each 1; A , J , D , and E are each CH_2 and the compound has the structure:



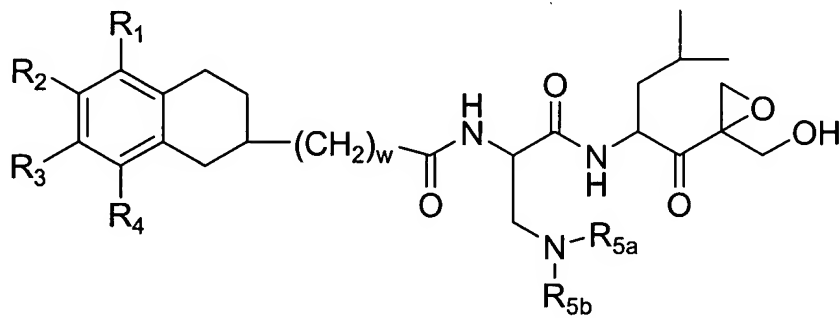
wherein w is 0, 1 or 2; and R_1 , R_2 , R_3 and R_4 are each independently hydrogen, OR_C , halogen, or $NR_C R_D$, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

19. **(Original)** The compound of claim 1, wherein x , y and z are each 1; A , J , D , and E are each CH_2 and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety; w is 0, 1 or 2; and R_1 , R_2 , R_3 and R_4 are each independently hydrogen, OR_C , halogen, or $NR_C R_D$, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

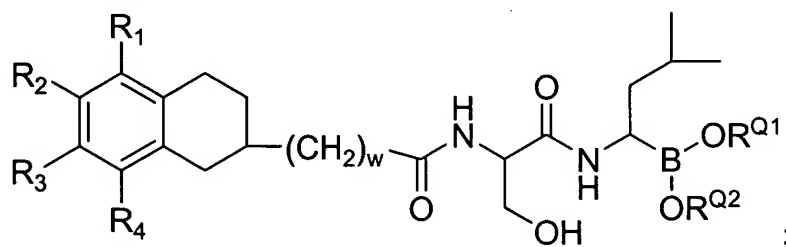
20. **(Original)** The compound of claim 1, wherein x , y and z are each 1; A , J , D , and E are each CH_2 and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an

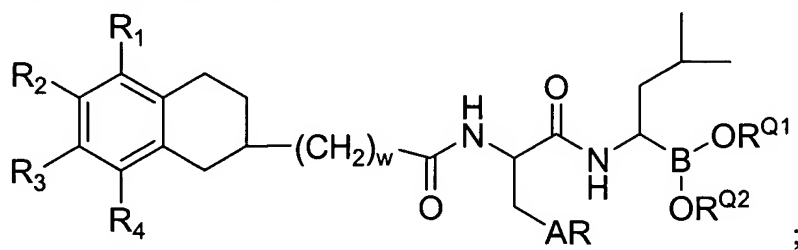
aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b} , taken together, form a heteroalicyclic or heteroaryl moiety; w is 0, 1 or 2; and R_1 , R_2 , R_3 and R_4 are each independently hydrogen, OR_C , halogen, or $NR_C R_D$, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

21. **(Original)** The compound of claim 1, wherein x , y and z are each 1; A, J, D, and E are each CH_2 and the compound has the structure:



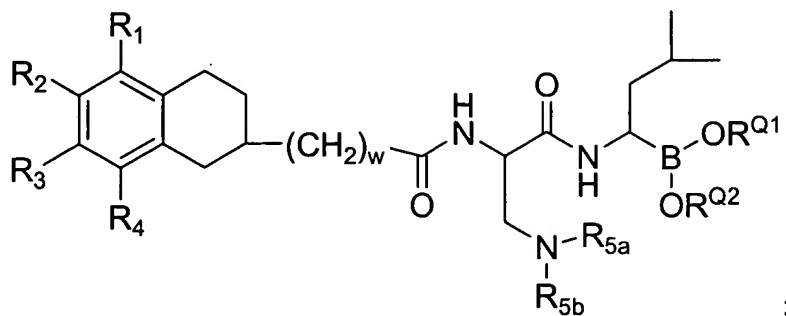
wherein R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2} , taken together, form a heteroalicyclic moiety; w is 0, 1 or 2; and R_1 , R_2 , R_3 and R_4 are each independently hydrogen, OR_C , halogen, or $NR_C R_D$, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

22. **(Original)** The compound of claim 1, wherein x , y and z are each 1; A, J, D, and E are each CH_2 and the compound has the structure:



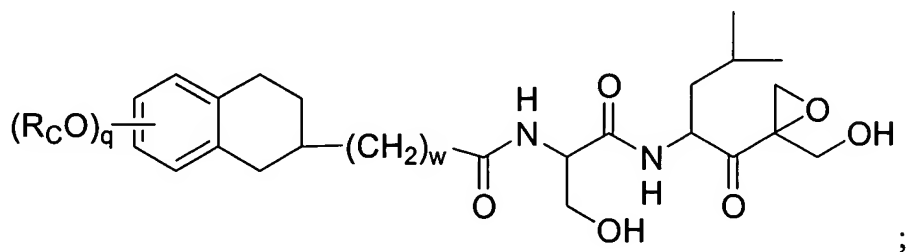
wherein AR is an aryl or heteroaryl moiety; R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2} , taken together, form a heteroalicyclic moiety; w is 0, 1 or 2; and R_1 , R_2 , R_3 and R_4 are each independently hydrogen, OR_C , halogen, or $NR_C R_D$, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

23. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



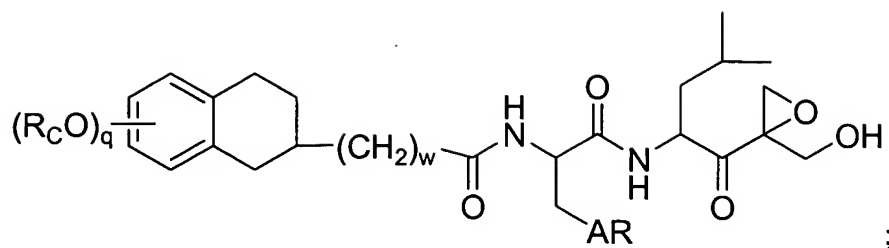
wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b}, taken together, form a heteroalicyclic or heteroaryl moiety; R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2}, taken together, form a heteroalicyclic moiety; w is 0, 1 or 2; and R₁, R₂, R₃ and R₄ are each independently hydrogen, OR_C, halogen, or NR_CR_D, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

24. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



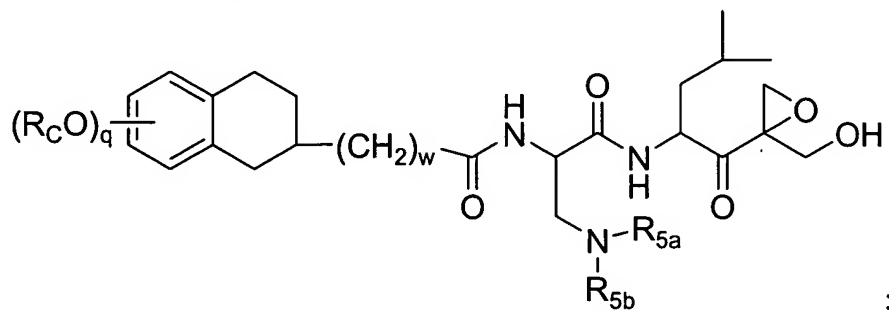
wherein w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

25. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



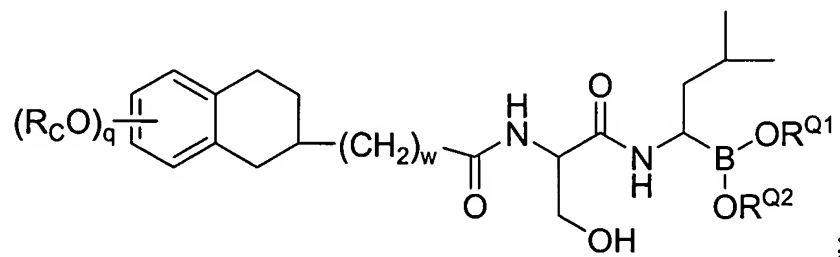
wherein AR is an aryl or heteroaryl moiety; w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

26. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH_2 and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b} , taken together, form a heteroalicyclic or heteroaryl moiety; w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

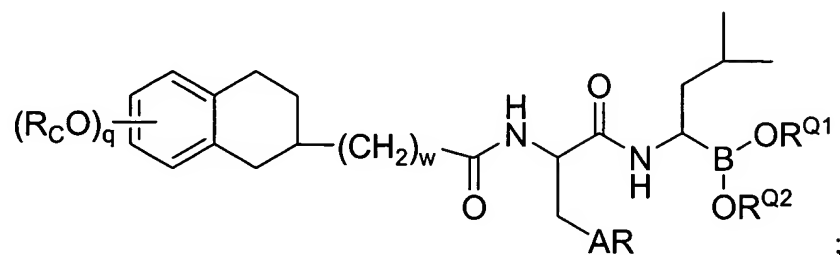
27. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH_2 and the compound has the structure:



wherein R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1}

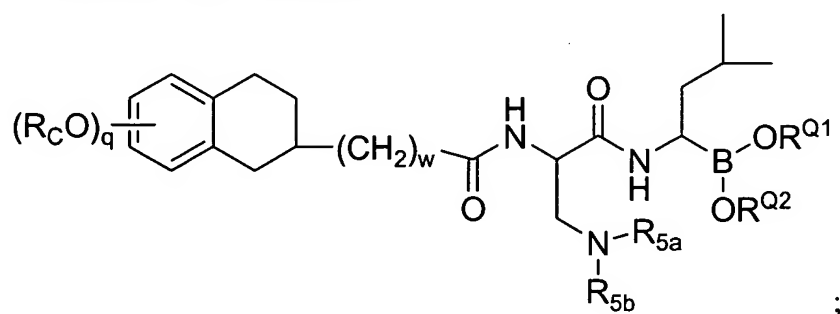
and R^{Q2} , taken together, form a heteroalicyclic moiety; w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

28. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH_2 and the compound has the structure:



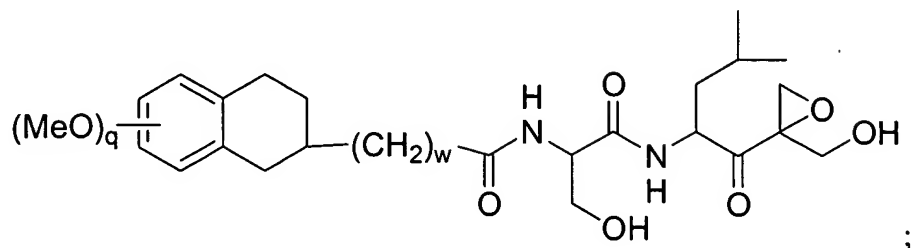
wherein AR is an aryl or heteroaryl moiety; R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2} , taken together, form a heteroalicyclic moiety; w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

29. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH_2 and the compound has the structure:



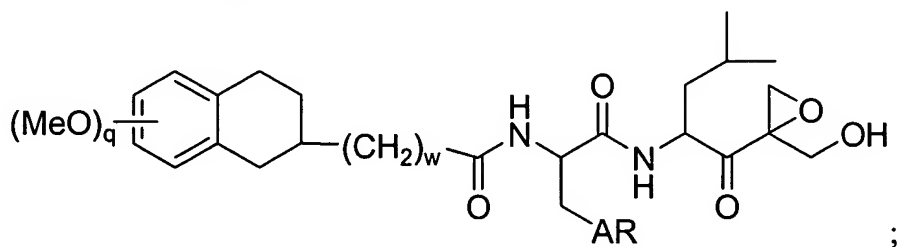
wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b} , taken together, form a heteroalicyclic or heteroaryl moiety; R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2} , taken together, form a heteroalicyclic moiety; w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

30. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



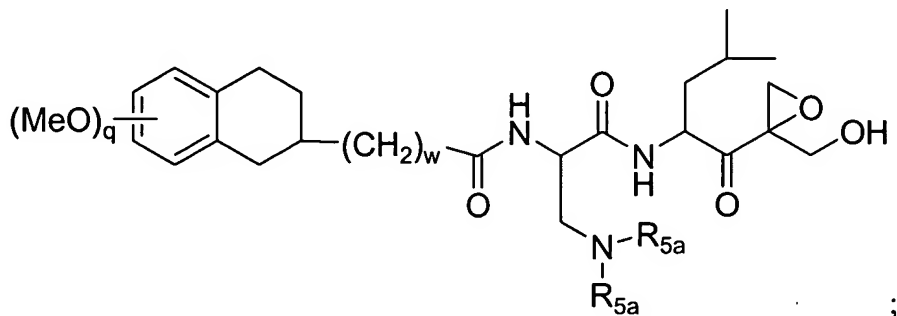
wherein w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

31. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety; w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

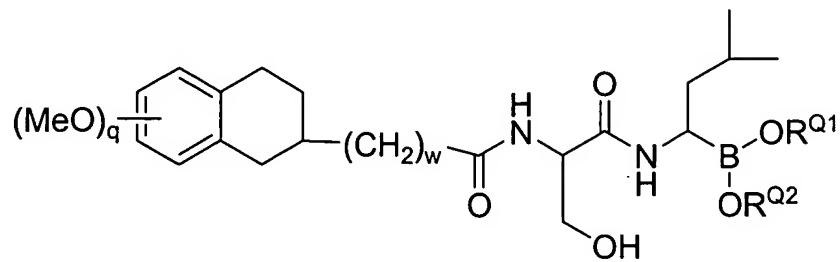
32. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or

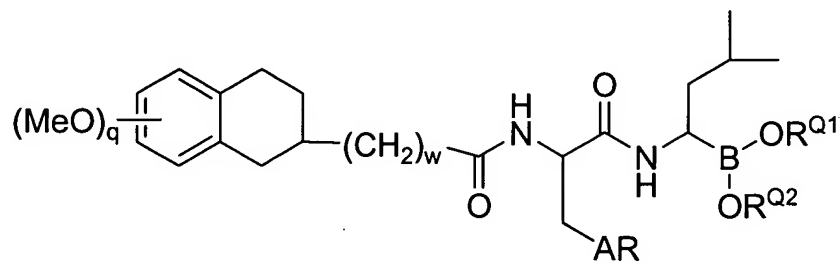
R_{5a} and R_{5b}, taken together, form a heteroalicyclic or heteroaryl moiety; w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

33. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



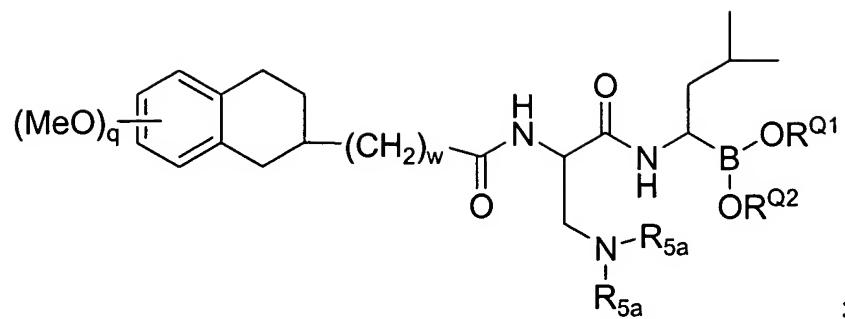
wherein R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2}, taken together, form a heteroalicyclic moiety; w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

34. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety; R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2}, taken together, form a heteroalicyclic moiety; w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

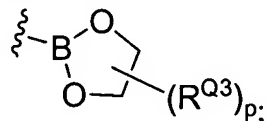
35. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b} , taken together, form a heteroalicyclic or heteroaryl moiety; R^{Q1} and R^{Q2} are each independently hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2} , taken together, form a heteroalicyclic moiety; w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

36. **(Original)** The compound of any one of claims 21-23, 27-29 and 33-35, wherein R^{Q1} and R^{Q2} are each hydrogen.

37. **(Original)** The compound of any one of claims 21-23, 27-29 and 33-35, wherein – $B(OR^{Q1})(OR^{Q2})$ is a moiety having the structure:



wherein R^{Q3} is lower alkyl and p is an integer from 0-4.

38. **(Previously Presented)** The compound of any one of claims 1, 2, 5-7, and 10-12, wherein x , y and z are each 1 and A-J-D-E together represent $-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-$.

39. **(Previously Presented)** The compound of any one of claims 1, 2, 5-7, and 10-12, wherein x is 0, y and z are each 1, and J-D-E together represent $-\text{CH}_2-\text{CH}_2-\text{CH}_2-$.

40. **(Previously Presented)** The compound of any one of claims 1, 2, 5-7, and 10-12, wherein x is 0, z is 0 and E is absent and J-D together represents $-\text{CH}_2-\text{CH}_2-$.
41. **(Previously Presented)** The compound of any one of claims 1, 2, 5-7, and 10-12, wherein x, y and z are each 1 and A-J-D-E together represent $-\text{N}=\text{CH}-\text{CH}=\text{N}-$.
42. **(Previously Presented)** The compound of any one of claims 1, 2, 5-7, and 10-12, wherein x, y and z are each 1 and A-J-D-E together represent $-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-$ and G is CH_2 and w is 0, 1 or 2.
43. **(Currently Amended)** The compound of ~~any one of claims 1-7, 10-12 and 18-23~~ claim 1, wherein R_1 , R_2 , R_3 and R_4 are each independently hydrogen, halogen, protected or unprotected hydroxyl, protected or unprotected thiol, protected or unprotected amino, alkyl, alkoxy, thioalkyl, mono-or di-substituted alkylamino, or wherein any two adjacent groups R_1 , R_2 , R_3 or R_4 , taken together are a cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety,
whereby each of the alkyl moieties is independently substituted or unsubstituted, linear or branched, cyclic or acyclic, and each of the aryl and heteroaryl moieties is independently substituted or unsubstituted.
44. **(Currently Amended)** The compound of ~~any one of claims 1-7, 10-12 and 18-23~~ claim 1, wherein R_1 , R_2 , R_3 and R_4 are each independently hydrogen or lower alkoxy.
45. **(Currently Amended)** The compound of ~~any one of claims 1-7, 10-12 and 18-23~~ claim 1, wherein R_1 , R_2 , R_3 and R_4 are each independently hydrogen or methoxy.
46. **(Currently Amended)** The compound of ~~any one of claims 1-7, 10-12 and 18-23~~ claim 1, wherein R_1 , R_2 , R_3 and R_4 are each methoxy.

47. **(Currently Amended)** The compound of ~~any one of claims 1-7, 10-12 and 18-23~~ claim 1, wherein R₁ is hydrogen and each of R₂, R₃ and R₄ are independently lower alkoxy.

48. **(Currently Amended)** The compound of ~~any one of claims 1-7, 10-12 and 18-23~~ claim 1, wherein R₁ is hydrogen and each of R₂, R₃ and R₄ are methoxy.

49. **(Currently Amended)** The compound of ~~any one of claims 1-4~~ claim 1, wherein R₅ is alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, cycloalkynyl, C₁₋₆OR_{5a}, C₁₋₆NR_{5a}R_{5b}, aryl or heteroaryl; wherein R_{5a} and R_{5b} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, -C(NH₂)=N(NO₂), -C(=O)OR_{5c}, -C(=O)R_{5c} or a protecting group; wherein R_{5c} is hydrogen, alkyl, alkenyl, alkynyl, aryl or heteroaryl.

50. **(Currently Amended)** The compound of ~~any one of claims 1-4~~ claim 1, wherein R₅ is alkyl, cycloalkyl, -CH₂OR_{5a}, -CH₂NR_{5a}R_{5b}, -CH₂aryl or -CH₂heteroaryl; wherein R_{5a} and R_{5b} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, -C(NH₂)=N(NO₂), -C(=O)OR_{5c}, -C(=O)R_{5c} or a protecting group; wherein R_{5c} is hydrogen, alkyl, alkenyl, alkynyl, aryl or heteroaryl.

51. **(Currently Amended)** The compound of ~~any one of claims 1-4~~ claim 1, wherein R₅ is alkyl, cycloalkyl, CH₂OR_{5a}, CH₂NR_{5a}R_{5b} or substituted or unsubstituted -CH₂Ph; wherein R_{5a} and R_{5b} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, -C(NH₂)=N(NO₂), -C(=O)OR_{5c}, -C(=O)R_{5c} or a protecting group; wherein R_{5c} is hydrogen, alkyl, alkenyl, alkynyl, aryl or heteroaryl.

52. **(Currently Amended)** The compound of ~~any one of claims 1-4~~ claim 1, wherein R₅ is -CH₂OH or benzyl.

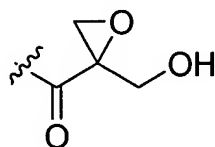
53. **(Currently Amended)** The compound of ~~any one of claims 1-4~~ claim 1, wherein R₆ is alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, cycloalkynyl, aryl or heteroaryl.

54. **(Currently Amended)** The compound of ~~any one of claims 1-4~~ claim 1, wherein R₆ is lower alkyl or aryl.

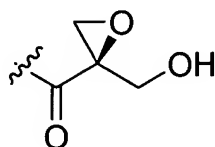
55. **(Currently Amended)** The compound of ~~any one of claims 1-4~~ claim 1, wherein R₆ is -CH₂CH(CH₃)₂.

56. **(Canceled)**

57. **(Previously Presented)** The compound of claim 1, 2, 3 or 4, wherein Q has the structure:



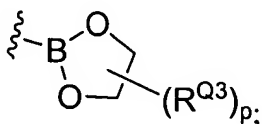
58. **(Original)** The compound of claim 57, wherein Q has the structure:



59. **(Canceled)**

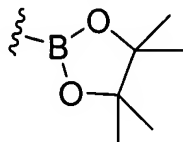
60. **(Previously Presented)** The compound of claim 1, 2, 3 or 4, wherein Q is -B(OH)₂.

61. **(Previously Presented)** The compound of claim 1, 2, 3 or 4, wherein Q has the structure:



wherein R^{Q3} is lower alkyl and p is an integer from 0-4.

62. **(Original)** The compound of claim 61, wherein Q has the structure:



63. **(Currently Amended)** A pharmaceutical composition comprising a compound of ~~any one of claims 1-7, 10-12 and 18-35~~ claim 1; and

a pharmaceutically acceptable carrier or diluent, and optionally further comprising an additional therapeutic agent.

64. **(Original)** The pharmaceutical of claim 63 wherein the compound is present in an amount effective to exert an antiproliferative and/or anticancer effect.

65. **(Original)** The pharmaceutical of claim 63 wherein the compound and the additional therapeutic agent are present in an amount effective to exert an antiproliferative and/or anticancer effect.

66. **(Original)** The pharmaceutical of claim 63 wherein the compound is present in an amount effective to exert an anti-inflammatory effect.

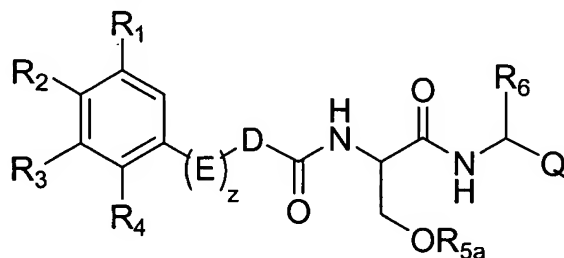
67. **(Original)** The pharmaceutical of claim 63 wherein the compound and the additional therapeutic agent are present in an amount effective to exert an anti-inflammatory effect.

68. **(Currently Amended)** A method for treating cancer comprising:
administering to a subject in need thereof a therapeutically effective amount of a compound of ~~any one of claims 1-7, 10-12 and 18-35~~ claim 1; and
optionally further administering an additional therapeutic agent.

69. **(Original)** The method of claim 68, wherein the method is used to treat prostate, breast, colon, bladder, cervical, skin, testicular, kidney, ovarian, stomach, brain, liver, pancreatic or esophageal cancer or lymphoma, leukemia, or multiple myeloma.

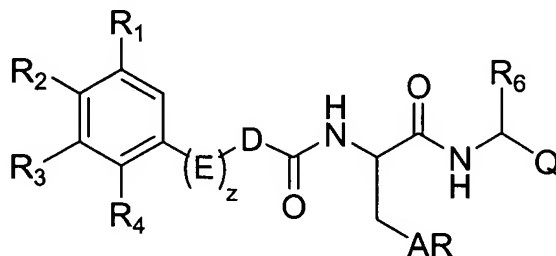
70. **(Original)** The method of claim 68, wherein the cancer is a solid tumor.

71. **(Previously Presented)** The compound of claim 3 having the structure:



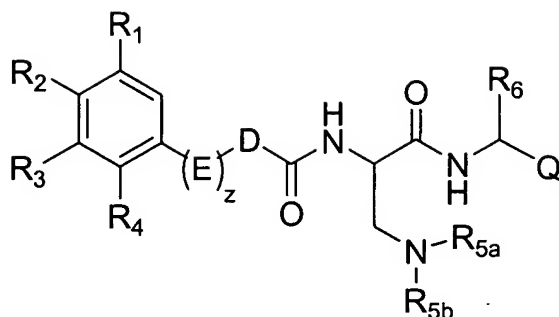
wherein R_{5a} is hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, an oxygen protecting group or a prodrug moiety.

72. **(Previously Presented)** The compound of claim 3 having the structure:



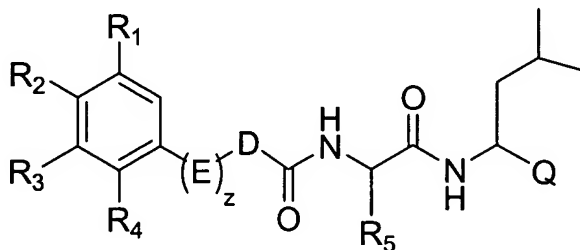
wherein AR is an aryl or heteroaryl moiety.

73. **(Previously Presented)** The compound of claim 3 having the structure:

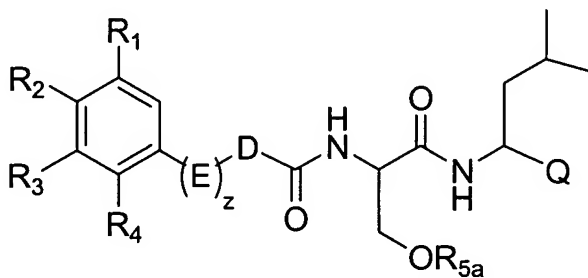


wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b} , taken together, form a heteroalicyclic or heteroaryl moiety.

74. **(Previously Presented)** The compound of claim 3 having the structure:

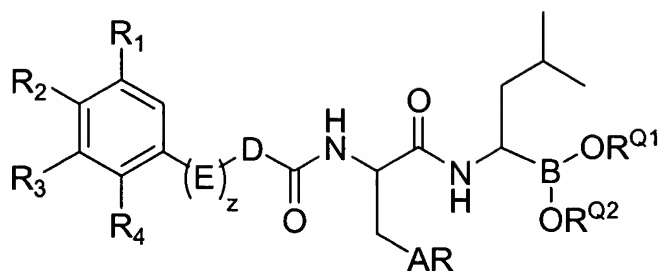


75. **(Previously Presented)** The compound of claim 3 having the structure:



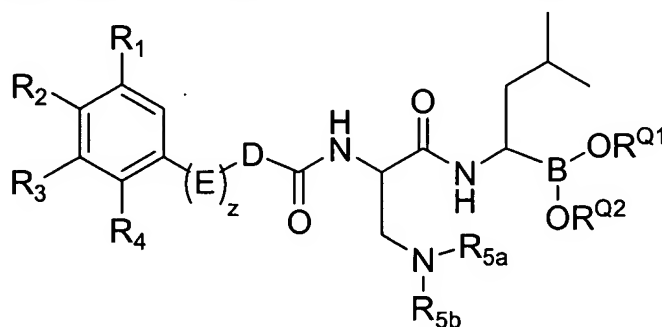
wherein R_{5a} is hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, an oxygen protecting group or a prodrug moiety.

76. **(Previously Presented)** The compound of claim 3 having the structure:



wherein AR is an aryl or heteroaryl moiety.

77. **(Previously Presented)** The compound of claim 3 having the structure:

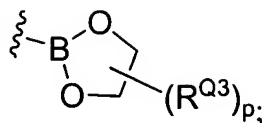


wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b} , taken together, form a heteroalicyclic or heteroaryl moiety.

78. **(Previously Presented)** The compound of any one of claims 2, 3 and 71-77, wherein D is absent and z is 0.

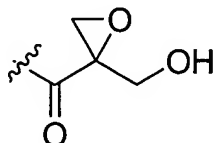
79. **(Previously Presented)** The compound of any one of claims 2, 3 and 71-77, wherein Q is $-B(OH)_2$.

80. **(Previously Presented)** The compound of any one of claims 2, 3 and 71-77, wherein Q is a moiety having the structure:



wherein R^{Q3} is lower alkyl and p is an integer from 0-4.

81. **(Previously Presented)** The compound of any one of claims 2, 3 and 71-77, wherein Q is a moiety having the structure:



82. **(Previously Presented)** The compound of claim 81, wherein Q is a moiety having the structure:

